Cognitive Testing in New Environments

QUEST 2013

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Session aims

- To focus on developments in cross-cultural/cross national surveying
- To report on how new developments in technology and communications are being investigated by RTI with a view to improving survey research methods
- To promote group discussion

Cross-cultural research requirement

- Increased requirement to produce data that is equivalent across cultures
  - Increased requirement for comparable cross-cultural surveying in one country
  - Increased requirement for data that can be compared cross-nationally

Cross-cultural: instrument development method

Three approaches:

1. Simultaneous development and concurrent testing of all language versions
2. Development of source questionnaire with concurrent testing in other languages
3. Development of source questionnaire with different language versions each tested in isolation

Example: Development of the European Health and Social Integration Survey (EHSIS)

- Main stage survey conducted in 28 countries across Europe translated from the English source questionnaire into:
  - Austrian, Bulgarian, Croatian, Czech, Danish, Dutch, Estonian, Flemish, French, Greek, Finnish, German, Hungarian, Icelandic, Italian, Latvian, Lithuanian, Maltese, Norwegian, Polish, Portuguese, Romanian, Russian, Slovak, Slovenian, Spanish, Swedish.
- Staged approach to testing and development
  - Initially cognitively tested in UK, Italy and Lithuania
  - Further, testing conducted, either cognitive or pilot test, or both, in 10 countries: Bulgaria, Czech Republic, Estonia, Finland, Greece, Hungary, Latvia, Malta, Slovakia and Spain
  - Reported using standard Eurostat forms
  - Collation and synthesis of testing results
  - Findings informed design of questionnaire to be implemented cross-nationally

Evaluation Methodology

- Collation and synthesis presented in Excel spreadsheets

  Two stages:
  - Evaluation of methodology used by 10 MS using specified quality criteria
  - Reported findings synthesised (section by section, question by question)

- Data set created from which recommendations made

Findings

- **Issues reported by more than one country -** Conceptual, comprehension, definitions, standardisation, module order, length of questionnaire

  Norway *"...for any reason" not easily translated into Scandinavian languages. The concept has negative connotations instead give examples such as for work, games, seeking information, buying goods or chatting etc.*

  Spain *"Comprehension issues with term access - remove the word*

  Spain *Word "pubs" translated as "bar"*

  *"**Italy** The number of questions in this section could be reduced*

  Latvia *Add note to int ins that access to the Internet via cellular phone is included*

  Estonia *R did not give much attention to categories towards the end of the list*

- **Issues reported by one country -** Conceptual, definitions, sensitivity, survey administration

  Finland *There is no direct Finnish equivalent to the English concept of "making ends meet"*

  Latvia *Add response category "Cannot make ends meet at all" or combine with "great difficulty" because some Rs could not make ends meet at all and were in great financial difficulty*

  Estonia *Word "opera" and "theatre" the same in Estonian and Russian*

  Czech republic *The meaning of the phrases 'very often' and 'quite often' are identical*

  Czech republic *Question about budgeting was for many Rs a sensitive topic and they had strong hesitations about disclosing such information.*

Advantages and disadvantages

- Advantages
  - Easier to manage than simultaneous and/or concurrent development when large number of languages and different organisations involved
  - Ability to make changes to source questionnaire after each stage of testing
  - No one ‘main’ language or cultural bias
- Disadvantages
  - Some countries had no input into development
  - Quality of pretesting methodologies differed between countries (sampling and analysis of cognitive interviews)

RTIs program on Digital Technology and Society

- Incorporating developments in technology and communications into traditional survey methods. Specifically:
  - Mobile technologies (tablets, smartphones,SMS)
  - Social media (Facebook, Twitter)
  - Other digital media (virtual worlds, internet search patterns, online communities and networks)

Enriching and expanding our toolbox for cognitive testing

- Cognitive interviewing using Skype
- Cognitive interviewing in the virtual world of Second Life
- Recruitment for cognitive interviewing using facebook and Second life


Second Life
Me
Communicate
World
Build
Help
L$ 1,203
Buy L$
Shop
1:02 PM PST
Healthinfo Island Research Pavilion , Healthinfo Island - Ge
RTI
BLUE ROOM (F2F int...
GREEN ROOM (Web)
More
Survey Questions
The survey should take approximately 20 minutes to complete.
The survey asks about your
and exercise habits, as well as specific health
about a medical condition you may have.
Even though the survey is coordinated in Second Life
please respond about your real life
atherine Cunningham
Debbie Platthy
Kate Congdon
JANE
Josh
iSkye Bonde
Namro Orman
Carla Broek
Gentle Heron
Kirsten Beck
Ladyslipper Constantine
Gentle Heron About Us: (see the slide)
The purpose of this study is to recruit subjects for a survey
Survey specifics (see the slide)
First we will determine if you are eligible (over 18 and from US)
It is web based survey
All communication takes place in SL
We will be here about another 3-4 weeks.
Stand
MHS #703.1: Patio Chair
Chat
Speak
Destinations
People
Profile
Walk / run / fly
Camera controls
How to
4:02 PM
1/16/2012

Enriching and expanding our tool box for questionnaire design

- Second life – virtual world
- Crowdsourcing – an open call to a large network or community of people (crowd) to provide independent or collaborative contributions
- Social media – twitter, face book
- Text mining / Sentiment analysis (opinion/attitude) – automated
- Other? Please specify…….

Combine Approaches for Maximum Return

- Example: What are health concerns of adults aged 45-60?

  - *Crowdsource* open-ended questions identifying health concerns in population of interest.
  - Conduct *infoveillance* with data capture of statements expressed across over 100 million blogs, tens of thousands of internet forums, over 20,000 mainstream news outlets, Twitter, YouTube, Flickr, MySpace and others as far back as March 2008.
  - *Analyze sentiment* of web content using *crowdsourced* knowledge workers.

Further information

- Book chapter on virtual cognitive interviewing, using Second Life and Skype, forthcoming in Wiley edited volume Social Media, Sociality & Survey Research, eds Hill, Dean & Murphy
- Jodi Swicegood will be presenting on the topic at AAPOR this year
- RTI blog SurveyPost: https://blogs.rti.org/surveypost/

Group discussion

- How often does your agency assess the capability of cognitive testing across modes or cultures?
- How well does cognitive testing perform in new surveying environments?
- What adaptations to cognitive testing practice, if any, have taken place in your agency?
- How do we use cognitive testing to assess the comparability of data across modes and across cultures?
- In what ways are new technologies being used in your agency?
- How can we make use of new technology and new ways of communicating to expand our tool box, in respect to cognitive methods and questionnaire design?

Contacts

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